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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,472	01/21/2004	Morris Diltmore	103485.143US2	2619
23483	7590	08/02/2005	EXAMINER	
WILMER CUTLER PICKERING HALE AND DORR LLP 60 STATE STREET BOSTON, MA 02109			YEE, DEBORAH	
			ART UNIT	PAPER NUMBER
			1742	
DATE MAILED: 08/02/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/761,472

Applicant(s)

DILMORE ET AL.

Examiner

Deborah Yee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 3-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,21 and 22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5-10-05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1,2,21 and 22 are, drawn to an alloy steel composition and its named product, classified in class 420, subclass 109.
 - II. Claims 3 to 20 are, drawn to method of processing alloy steel by normalizing, austenitizing, quenching and tempering, classified in class 148, subclass 663.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of group II and group I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process as claimed can be used to make other and materially different products since process does not require a specific steel alloy composition. Note process claims recite treating an alloy steel in general which would encompass numerous steel alloy compositions different from those of Group I; hence the process makes different products because of different steel alloy compositions.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Ms. Christine Etheridge on July 26, 2005 a provisional election was made without traverse to prosecute the invention of group I, claims 1,2,21 and 22. Affirmation of this election must be made by applicant in replying to this Office action. Claims 3 to 18 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Hasegawa (US 5,766,376) or Ishii et al (US Patent 6,494,970) which were cited by applicant in IDS dated 5-10-05.

8. Ishii alloy examples P3, P4, P7 and P8 in Table 1 of column 10 and alloy examples P28 and P29 in Table 5 of column 18, and Hasegawa example 19 in Table 1 of column 10 have compositions which meet claim 1.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa (US Patent 5,766,376) cited by applicant in IDS dated 5-10-05 in view of Table 1.1 of Introduction Steels and Cast Irons publication..

11. Hasegawa in lines 15 to 40 of column 3 disclose a steel alloy with constituents whose wt% ranges encompass those recited by the specific composition recited by claim 2 except for Si content. Since applicant has not demonstrated criticality of Si content of about 1% (e.g. by comparative test data), then it would appear that a composition with about 1%Si vs. a composition with slightly less (say 0.8%) Si would depict a mere difference in the proportion of element without any attendant unexpected results which would not patentably distinguish claim over prior art. Note that applicant's specification discloses zero to 1.25%Si as permissible, and no comparative test data has been provided.

12. Also even though prior art does not teach 0.011%Al, 0.1%Cu and 0.02%Ca as recited by claim 2, such would not be a patentable difference. Note that these elements are well known and common additives conventionally added to steel to further enhance strength, hardness, and/or refine by deoxidizing as evident by the secondary

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teaching. Hence it would be an obvious modification well within the skill of the artisan to include Al, Cu and Ca to the Hasegawa alloy to produce no more than the known and expected effect of such an addition.

13. Claim 21 rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ishii et al (US Patent 6,494,970) alone or in view of Lyon (US Patent 2,942,339).

14. Ishii steel alloy examples meet the claimed composition as discussed in paragraph 8. Moreover, lines 12 to 16 of column 1 of Ishii discloses using steel to make steam turbine casings; such prior art casing would be patentably equivalent to the casing recited by claim 21. Even though prior art does not teach using the casing for a bomb as recited by claim 21, such would not be a patentable difference since it would merely be applicant's future and intended use.

15. Moreover, it is well known in the art as evident by secondary teaching that low-carbon steels having high strength and ductility are used for making bomb casings (see Lyon, lines 40 to 50 in column 2). Since Ishii is a low-carbon steel having high strength and ductility, then it would be an obvious choice well within the skill of the artisan to use Ishii steel for making bomb casings.

16. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al (US Patent 5,766,376) alone or in view of Lyon (US Patent 2,942,339).

17. Hasegawa steel alloy examples meet or closely meet the compositions recited by the claims. Moreover, lines 5 to 29 in column 1 of Hasegawa discloses using steel to

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make pipes in thermal power plants. The prior art pipe would be considered a casing and hence would be patentably to the casing recited by claims 21 and 22 since they are both structural components uses as a container. Even though prior art does not teach using the casing for a bomb as recited by claims 21 and 22, such would not be a patentable difference since it would merely be applicant's future and intended use.

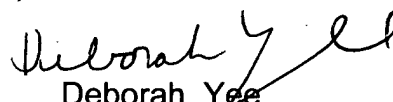
18. Moreover, it is well known in the art as evident by secondary teaching that low-carbon steels having high strength and ductility are conventionally used for making bomb casings (see Lyon, lines 40 to 50 in column 2). Since Ishii is a low-carbon steel having high strength and ductility, then it would be an obvious choice well within the skill of the artisan to use Ishii steel for making bomb casings.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Yee whose telephone number is 571-272-1253. The examiner can normally be reached on Monday-Friday from 6:00 to 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Deborah Yee
Primary Examiner
Art Unit 1742

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